



## wave-scan DOI

### The Objective Eye for a Brilliant Finish

The appearance of surface changes with the size and distinctness of structures. Structures will be perceived as being very distinct, if e.g. an edge is reflected on the surface with high contrast and sharpness. The wave-scan DOI evaluates structure size as well as the brilliance of the surface.

### Total Appearance - Orange Peel and DOI

- High correlation to the visual by analyzing the structure size: Ultra short to Ultra long wave
- DOI: Distinctness of Image - objective criteria for brilliance and gloss
- Classical Long wave (LW) and Short wave (SW)
- Independent of paint system and refractive index - no matter whether comparing 1 K, 2 K or powder coating
- Reproducible results on test panels and curved parts ( $r > 1 \text{ m}$ )
- For solid and metallic coatings

### ... in one handy instrument

- portable; easy to operate with one hand
- highly reliable results due to self calibration
- operation according to your own sampling procedures
- storage of 599 readings with clear object identification
- auto-chart software for professional analysis, documentation and data management

## Ordering Info

Cat. No.	Description	Price
GB-4816	wave-scan DOI	19950.00

### Comes complete with:

wave-scan DOI  
Reference tile with certificate  
Protective holder  
Interface cable  
Software auto-chart on CD-ROM<sup>1</sup>  
Batteries  
Operating Manual  
Carrying case

### <sup>1</sup>Hardware requirements:

PC with operating system: Windows® 95/98 or NT (Pentium recommended), CD-ROM drive, min. 32 MB RAM (recommended 128 MB), min. 40 MB hard-disk space, free serial and parallel interface, Excel® 97-Vers.8 for pre-prepared worksheets

## Technical Specifications

<b>Measurement Range</b> DOI 0 to 100 Long wave 0 to 100 Short wave 0 to 100	<b>Object Curvature</b> radius $> 1 \text{ m}$	<b>Interface</b> serial RS 232
<b>Structure spectrum</b> du $< 0.1 \text{ mm}$ Wa 0.1 to 0.3 mm Wb 0.3 to 1.0 mm Wc 1.0 to 3.0 mm Wd 3.0 to 10.0 mm We 10.0 to 30.0 mm	<b>Measurement Time</b> 4 seconds	<b>Dimensions (H x W x L)</b> 120 x 65 x 205 mm
<b>Repeatability<sup>2</sup></b> 4 % or $> 0.4$	<b>Light Source</b> Laser diode, LED	<b>Weight</b> 2.6 lbs. (1.2 kg)
<b>Reproducibility</b> 6% or $> 0.6$	<b>Energy Output</b> $< 1 \text{ mW}$ (laser class 2)	<b>Batteries</b> 4 x 1.5-Volt AA, app. 1000 measurements
<b>Scan Length</b> 50 / 100 / 200 mm	<b>CCD-Sensor</b> 640 x 480 Pixel	<b>Operating temperature</b> +50 °F to 104 °F (running) (+10 °C to 40 °C) 32 °F to 140 °F (storage) (0 °C to 60 °C)
<b>Resolution</b> 375 measurement points/cm	<b>Memory</b> 599 readings (40 profiles)	<b>Relative Humidity</b> up to 85% at 95 °F (35 °C)

<sup>2</sup> Standard deviation

Copyright BYK-Gardner 2000

For comments about this site contact [webmaster@bykgardnerusa.com](mailto:webmaster@bykgardnerusa.com)